

A NEW SPECIES OF THE GENUS LYONETIA ATTACKING ERIOBOTRYA JAPONICA IN CHINA (LEPIDOPTERA, LYONETIIDAE)

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Abstract *Lyonetia eriobotryae* is described as new to science from Yunnan Province, China. The larvae attacked the leaves and twigs of *Eriobotrya japonica*. Adult, genitalia, larva and cocoon are figured. A brief note on the biology is given.

Key words Lepidoptera, Lyonetiidae, *Lyonetia*, new species, China.

Alyonetiid moth attacking the leaves and twigs of *Eriobotrya japonica* has been recently found in Yunnan Province, China. As a result of examination, we concluded that this insect represents a new species belonging to the genus *Lyonetia* in the family Lyonetiidae. In this paper the species is described. A brief note on the biology is given. The terminology follows Kuroko (1964). Type specimens are deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing.

Lyonetia eriobotryae sp. nov. (Figs 1-8)

Wing expanse 6-7 mm. Head, face, tuft and thorax shining white. Labial palpi whitish tinged with pale fuscous externally. Antenna 1.3 times of forewing-length, pale grayish fuscous, becoming white towards base. Eye cap shining white. Abdomen pale grayish fuscous above, white below.

Forewing shining white; streak blackish fuscous: costal streak absent; 1st dorsal streak from before middle of dorsum, 2nd dorsal streak from 2/3 and 3rd one from 4/5; a yellowish-orange apical blotch occupying apical 1/5 of wing, with a blackish fringe on termen; costal and terminal cilia white, 3 grayish fuscous strigulae in costal cilia, a grayish fuscous curved strigula from end of apical blotch in terminal cilia; at apex a rounded black apical dot followed by a grayish fuscous transverse line; dorsal cilia pale grayish fuscous. Hindwing grayish fuscous; cilia pale grayish fuscous.

Male genitalia (Fig. 7). Longitudinal sclerotized ridge on 8th tergite furcated at anterior end; arms of superuncus placed at a distance from each other, rather slender, broadened basally, pointed distally;

arms of gnathos fused together, apex with 2 pairs of projections, the outer pointed, the inner rounded; valva very weak and oblong; eadeagus tubular, long, tapering to a pointed apex.

Female genitalia (Fig. 8). Posterior apophysis longer than anterior apophysis slightly; ductus bursae slender, slightly shorter than or as long as length of corpus bursae, with a weakly sclerotized small patch near juncture with corpus bursae; corpus bursae narrow and long, scattered with minute spines, with a long thorn-like signum.

Holotype ♂, Mengzi County (23.3°N, 103.4°E), Yunnan Province, 10 July 2005, leg. WU Chur Sheng and LI Zheng Yue. Paratypes: 5 ♂♂, 5 ♀♀, same data as holotype.

Distribution. China, Yunnan.

Host plant. *Eriobotrya japonica* (Rosaceae).

Biological note. This moth is polyvoltine and generation overlaps in Mengzi County, Yunnan Province. The egg is deposited into the mesophyll of the leaf of the host plant through the lower cuticle in the under margin. Newly hatched larva mines in a linear, and extending towards the base of the leaf, then mining into stem and twig. When the twig was dead, the mature larva pupates in a white cocoon on the underside of a new leaf.

Etymology. The specific name is derived from the genus name of its host plant, *eriobotrya*.

Remarks. This new species is similar to *L. clerkella* (Linnaeus) in genitalia, but differs from the latter in the quadrifurcate apex of gnathos in male genitalia and the longer signum in female genitalia. The new species resembles *L. anthemopa* Meyrick from Taiwan and Japan, but differs from the latter by



Figs 1-8. *Lyonetia eriobotryae* sp. nov. 1. Adult. 2. Resting posture of the adult. 3. Larva in the mine of twig. 4. Cocoon. 5. Larval mine on the leaf. 6. The twig attacked by the larva. 7. Male genitalia (a. superucus and 8th tergite; b. gnathos and valva; c. eadeagus). 8. Female genitalia.

the forewing without costal streaks and the female genitalia with a signum (the latter with costal streaks

on the forewing and the signum absent in female genitalia).

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危害枇杷的潜蛾属一新种 (鳞翅目, 潜蛾科)

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摘 要 记述了潜蛾属 (潜蛾亚科) 1 新种, 枇杷潜蛾 *Lyonetia eriobotryae* sp. nov.。该文提供了成虫外形、茧与幼虫的危害状照片及雌雄外生殖器解剖图。模式标本保存在中国科学院动物研究所。

成虫将卵产在枇杷嫩叶反面的端部边缘, 位于内外表皮之间。卵孵化后向叶基部钻蛀, 沿叶片的主脉蛀入嫩梢内, 导致嫩梢枯死, 严重影响枇杷的生长和结实。老熟幼虫爬到一片新叶的背面结一白色丝茧, 在其中化蛹。在云南省蒙自县枇杷的受害株率达 80% ~ 90%。该虫在云南蒙自 1 年发生多代, 世代重叠。

关键词 鳞翅目, 潜蛾科, 潜蛾属, 新种, 中国.

中图分类号 Q969.425.7

枇杷潜蛾, 新种 *Lyonetia eriobotryae* **sp. nov.** (图 1~8)

正模 ♂, 副模 5 ♂♂, 5 ♀♀, 云南省蒙自县, 2005-07-10, 武春生、李正跃采。

新种的外生殖器与桃潜蛾 *L. clerkella* (Linnaeus) 很相似, 但成虫前翅无中室端斑, 雄性外生殖器的颧形突末端小四叉形 (桃潜蛾为大二叉形), 雌性外生殖器的囊突明显长于桃潜蛾。成虫花纹与台湾产的石楠潜蛾 *L. anthemopa* Meyrick (也分布在日本) 相似, 但新种前翅缺前缘纹, 雌性外生殖器有 1 枚长的囊突 (石楠潜蛾前翅有前缘纹, 雌性外生殖器无囊突)。

词源: 新种名来自寄主植物的属名。